

L5 ANSWER 2 OF 7 AGRICOLA
AN 96:35723 AGRICOLA
DN IND20516814
TI Transgenic barley (*Hordeum vulgare* L.) by **electroporation** of
protoplasts.
AU Salmenkallio-Marttila, M.; Aspegren, K.; Akerman, S.; Kurten, U.;
Mannonen, L.; Ritala, A.; Teeri, T.H.; Kauppinen, V.
CS VTT Biotechnology and Food Research, Espoo, Finland.
AV DNAL (QK725.P54)
SO Plant cell reports, 1995. Vol. 15, No. 3/4. p. 301-304
Publisher: Berlin, W. Ger. : Springer International.
CODEN: PCRPD8; ISSN: 0721-7714
NTE Includes references
CY Germany
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L5 ANSWER 3 OF 7 AGRICOLA
AN 94:52219 AGRICOLA
DN IND20404563
TI Transformation of maize (*Zea mays* L.) protoplasts and regeneration of
haploid transgenic **plants**.
AU Sukhapinda, K.; Kozuch, M.E.; Rubin-Wilson, B.; Ainley, W.M.; Merlo, D.J.
AV DNAL (QK725.P54)
SO Plant cell reports, 1993. Vol. 13, No. 2. p. 63-68
Publisher: Berlin, W. Ger. : Springer International.
CODEN: PCRPD8; ISSN: 0721-7714
NTE Includes references
CY Germany
DT Article
FS Non-U.S. Imprint other than FAO
LA English

QK 725 . P555

L7 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2002 ACS
 AN 2001:178390 CAPLUS
 DN 134:219379
 TI Induction of embryogenesis from plant microspores
 IN Simmonds, Daina H.; Newcomb, William; Zhao, Jiping; Gervais, Carmen
 PA Canada, Minister of Agriculture and Agri-Food, Can.
 SO U.S., 17 pp., Cont.-in-part of U.S. 5,900,375.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6200808	B1	20010313	US 1999-299107	19990426
	CA 2145833	AA	19960930	CA 1995-2145833	19950329
	US 5900375	A	19990504	US 1996-623523	19960329
PRAI	CA 1995-2145833	A	19950329		
	US 1996-623523	A2	19960329		

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 57 AGRICOLA
 AN 2001:53457 AGRICOLA
 DN IND23216204
 TI **Electroporation** modulates the embryogenic responses to asparagus
 (Asparagus officinalis L.) microspores.
 AU Delaitre, C.; Ochatt, S.; Deleury, E.
 AV DNAL (442.8 P94)
 SO Protoplasma, 2001. Vol. 216, No. 1/2. p. 39-46
 Publisher: Wien : Springer-Verlag.
 CODEN: PROTA5; ISSN: 0033-183X
 NTE Includes references
 CY Austria
 DT Article
 FS Non-U.S. Imprint other than FAO
 LA English

L7 ANSWER 18 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 AN 2002:65513 BIOSIS
 DN PREV200200065513
 TI Plant transformation by gene transfer into **pollen**.
 AU Saunders, J. A.; Matthews, B. F.
 CS Dayton, Md. USA
 ASSIGNEE: THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF
 AGRICULTURE
 PI US 5629183 May 13, 1997
 SO Official Gazette of the United States Patent and Trademark Office Patents,
 (May 13, 1997) Vol. 1198, No. 2, pp. 1117.
 ISSN: 0098-1133.
 DT Patent
 LA English

L7 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:11478 CAPLUS
 DN 126:70744
 TI **Pollen** and embryo electro-transformation: developing a novel
 technique to introduce genes into maize
 AU Tsengwa, Nombasa
 CS Univ. of Maryland, College Park, MD, USA
 SO (1996) 125 pp. Avail.: Univ. Microfilms Int., Order No. DA9637734
 From: Diss. Abstr. Int., B 1997, 57(7), 4214
 DT Dissertation
 LA English

L7 ANSWER 22 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 AN 1996:343800 BIOSIS
 DN PREV199699066156
 TI Transgenic plants: Production and application on the use of microspores/

pollen for genetic modification.
AU Malik, C. P.; Ahuja, Ishita; Thind, Sanjeev K.; Bhatia, D. S.
CS Dep. Botany, Punjab Agric. Univ., Ludhiana 141004 India
SO Malik, C. P. [Editor]. Advances in Pollen-Spore Research, (1996) Vol. 21,
pp. 165-220. Advances in Pollen-Spore Research; Pollen-spore research:
Emerging strategies.
Publisher: Today and Tomorrow's Printers and Publishers 24 B/5 Deshbandhu
Gupta Road, Karol Bagh, New Delhi, India.
ISSN: 0376-480X. ISBN: 1-55528-279-2, 81-7019-422-9.
DT Book
LA English

L7 ANSWER 24 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
2
AN 1997:110627 BIOSIS
DN PREV199799409830
TI Exine-detached **pollen** of Nicotiana tabacum as an
electroporation target for gene transfer.
AU Shi Hua-Zhong, Wang Jin (1); Yang Hong-Yuan; Zhou Chang (1); Chen
Zheng-Hua
CS (1) Lab. Plant Reprod. Biol., Coll. Life Sci., Wuhan Univ., Wuhan 430072
China
SO Acta Botanica Sinica, (1996) Vol. 38, No. 8, pp. 626-630.
ISSN: 0577-7496.
DT Article
LA Chinese
SL Chinese; English

L7 ANSWER 26 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1995:464777 BIOSIS
DN PREV199598479077
TI Methods in Molecular Biology, Vol. 55. Plant cell **electroporation**
and electrofusion protocols.
AU Nickoloff, Jac A. [Editor]
CS Harvard Univ., Boston, MA USA
SO Nickoloff, J. A. [Editor]. Methods in Molecular Biology, (1995) Vol. 55,
pp. xiv+205p. Methods in Molecular Biology; Plant cell electroporation and
electrofusion protocols.
Publisher: Humana Press Inc. Suite 808, 999 Riverview Drive, Totowa, New
Jersey 07512, USA.
ISSN: 0097-0816. ISBN: 0-89603-328-7.
DT Book; (MANUAL)
LA English

L7 ANSWER 29 OF 57 AGRICOLA DUPLICATE 4
AN 95:51682 AGRICOLA
DN IND20475182
TI Rapid optimization of **electroporation** conditions for plant
cells, protoplasts, and **pollen**.
AU Saunders, J.A.; Lin, C.H.; Hou, B.H.; Cheng, J.; Tsengwa, N.; Lin, J.J.;
Smith, C.R.; McIntosh, M.S.; Van Wert, S.
CS SARL, USDA, ARS, Beltsville, MD.
AV DNAL (TP248.13.M65)
SO Molecular biotechnology, June 1995. Vol. 3, No. 3. p. 181-190
Publisher: Totowa, NJ : Humana Press, c1994-
CODEN: MLBOEO; ISSN: 1073-6085
NTE Includes references
CY New Jersey; United States
DT Article
FS U.S. Imprints not USDA, Experiment or Extension
LA English

L7 ANSWER 30 OF 57 AGRICOLA DUPLICATE 5
AN 95:57206 AGRICOLA
DN IND20479306
TI Introduction of impermeable molecules into **pollen** grains by
electroporation.
AU Obermeyer, G.; Weisenseel, M.H.
CS Universitat Salzburg, Salzburg.

AV DNAL (442.8 P94)
SO Protoplasma, 1995. Vol. 187, No. 1/4. p. 132-137
Publisher: Wien : Springer-Verlag.
CODEN: PROTA5; ISSN: 0033-183X

NTE Includes references
CY Austria
DT Article
FS Non-U.S. Imprint other than FAO
LA English

L7 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1995:882330 CAPLUS
DN 123:310231
TI **Pollen** electrotransformation in tobacco
AU Saunders, James A.; Matthews, Benjamin F.
CS Plant Sci. Inst., ARS, Beltsville, MD, USA
SO Methods in Molecular Biology (Totowa, NJ, United States) (1995), 55, 81-8
CODEN: MMBIED; ISSN: 1064-3745
DT Journal; General Review
LA English

L7 ANSWER 33 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1994:191436 BIOSIS
DN PREV199497204436
TI Analysis of transformed plants produced by **pollen**
electrotransformation.
AU Saunders, James A.; Smith, Camelia R.; Cheng, Jianping
CS SARL, Plant Sci. Inst., USDA/ARS, Beltsville, MD 20705 USA
SO Journal of Cellular Biochemistry Supplement, (1994) Vol. 0, No. 18 PART A,
pp. 101.
Meeting Info.: Keystone Symposium on Improved Crop and Plant Products
Through Biotechnology Keystone, Colorado, USA January 9-16, 1994
ISSN: 0733-1959.
DT Conference
LA English

L7 ANSWER 35 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
7
AN 1994:159810 BIOSIS
DN PREV199497172810
TI Transient GUS gene expression in Brassica napus **electroporated**
microspores.
AU Jardinaud, Marie-Francoise; Souvere, Andre (1); Alibert, Gilbert
CS (1) Lab. Biotechnologie, Amelioration Plantes, EA, Dred 832 INP, Ensat.
145 Muret, F-31076 Toulouse Cedex France
SO Plant Science (Limerick), (1993) Vol. 93, No. 1-2, pp. 177-184.
ISSN: 0168-9452.
DT Article
LA English

L7 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2002 ACS
AN 1996:166918 CAPLUS
DN 124:221810
TI Methods for gene transfer in plants using electrical manipulation,
successes and failures
AU Saunders, James A.; Smith, Camelia R.; Cheng, Jianping; Matthews, Benjamin
F.; O'Neill, Nichole R.
CS Plant Sciences Institute, USDA/ARS, Beltsville, MD, 20705, USA
SO Applications of Plant In Vitro Technology, Proceedings of the
International Symposium, Serdang, Malay., Nov. 16-18, 1993 (1993), 26-42.
Editor(s): Shamann, Nor Aripin. Publisher: Universiti Pertanian Malaysia,
Dep. of Biochemistry and Microbiology, Serdang, Malay.
CODEN: 62MEAQ
DT Conference; General Review
LA English

L7 ANSWER 39 OF 57 AGRICOLA
AN 93:12694 AGRICOLA
DN IND93002372

DUPLICATE 8

TI Electroporation and PEG delivery of DNA into maize microspores.
 AU Fennell, A.; Hauptmann, R.
 CS Northern Illinois University, DeKalb, IL
 AV DNAL (QK725.P54)
 SO Plant cell reports, 1992. Vol. 11, No. 11. p. 567-570
 Publisher: Berlin, W. Ger. : Springer International.
 CODEN: PCRPD8; ISSN: 0721-7714
 NTE Includes references.
 DT Article
 FS Non-U.S. Imprint other than FAO
 LA English

QK 725 . P555

L7 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2002 ACS
 AN 1992:484270 CAPLUS
 DN 117:84270
 TI Successful gene transfer in plants using **electroporation** and
 electrofusion
 AU Saunders, James A.; Van Wert, Sally L.; Smith, Camelia Rhodes; Matthews,
 Benjamin F.; Sinden, Stephen
 CS Beltsville Agric. Res. Cent., Plant Sci. Inst., Beltsville, MD, 20705, USA
 SO Charge Field Eff. Biosyst.--3, [Int. Symp.], 3rd (1992), Meeting Date
 1991, 243-62. Editor(s): Allen, Milton J. Publisher: Birkhaeuser, Boston,
 Mass.
 CODEN: 57VVAA
 DT Conference; General Review
 LA English

L7 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2002 ACS
 AN 1991:158561 CAPLUS
 DN 114:158561
 TI Plant transformation by gene transfer into **pollen**
 IN Saunders, James A.; Matthews, Benjamin F.
 PA Agricultural Research Service, USA
 SO U. S. Pat. Appl., 31 pp. Avail. NTIS Order No. PAT-APPL-7-530 485.
 CODEN: XAXXAV
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 530485	A0	19901101	US 1990-530485	19900601
	US 5629183	A	19970513	US 1994-345869	19941128
PRAI	US 1989-350356		19890508		
	US 1990-530485		19900601		

L7 ANSWER 47 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
 AN 1990:506266 BIOSIS
 DN BR39:118262
 TI THE DEVELOPMENT OF **POLLEN** TRANSFORMATION USING
ELECTROPORATION IN TOBACCO.
 AU SAUNDERS J A; MATTHEWS B F
 CS GERMPLASM QUALITY AND ENHANCEMENT LAB., USDA/ARS, BELTSVILLE, MD. 20705.
 SO SYMPOSIUM ON MOLECULAR STRATEGIES FOR CROP IMPROVEMENT HELD AT THE 19TH
 ANNUAL UCLA (UNIVERSITY OF CALIFORNIA-LOS ANGELES) SYMPOSIA ON MOLECULAR
 AND CELLULAR BIOLOGY, KEYSTONE, COLORADO, USA, APRIL 16-22, 1990. J CELL
 BIOCHEM SUPPL. (1990) 0 (14 PART E), 289.
 CODEN: JCBSD7.
 DT Conference
 FS BR; OLD
 LA English

L7 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2002 ACS
 AN 1990:153098 CAPLUS
 DN 112:153098
 TI Plant transformation by gene transfer into **pollen**
 IN Saunders, James A.; Matthew, Benjamin F.
 PA United States Dept. of Agriculture, USA
 SO U. S. Pat. Appl., 19 pp. Avail. NTIS Order No. PAT-APPL-7-350 356.
 CODEN: XAXXAV

DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 350356	A0	19890915	US 1989-350356	19890508
	US 5629183	A	19970513	US 1994-345869	19941128
PRAI	US 1989-350356		19890508		
	US 1990-530485		19900601		

L7 ANSWER 56 OF 57 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1988:50034 BIOSIS
DN BA85:26893
TI IN-VITRO **ELECTROPORATION** OF TOBACCO **POLLEN**.
AU MISHRA K P; JOSHUA D C; BHATIA C R
CS MOL. BIOL. DIV., BHABHA ATOMIC RES. CENTRE, TROMBAY, BOMBAY-400 085,
INDIA.
SO PLANT SCI (SHANNON), (1987) 52 (1-2), 135-140.
CODEN: PLSCE4. ISSN: 0168-9452.
FS BA; OLD
LA English

QK1 .P69

L7 ANSWER 57 OF 57 AGRICOLA
AN 1999:1598 AGRICOLA
DN IND21807761
TI Plant transformation by gene transfer into **pollen**.
AU Saunders, J.A.; Matthews, F.
SO [United States Department of Agriculture patents], 1 p
Publisher: [Washington, D.C.? : The Department, 1900?-
NTE Copies of USDA patents are available for a fee from the Commissioner of
Patents and Trademarks, U.S. Patent and Trademark Office, Washington, D.C.
20231.
Includes references
CY District of Columbia; United States
DT Article
FS USDA
LA English

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(FILE 'HOME' ENTERED AT 16:01:04 ON 15 OCT 2002)

FILE 'AGRICOLA, BIOSIS, CAPLUS, EMBASE' ENTERED AT 16:01:16 ON 15 OCT 2002

L1 3148 S MICROSPORE AND PLANT
L2 0 S L1 AND ELECROPORAT###
L3 136 S L1 AND TRANSFORM####
L4 82 DUP REM L3 (54 DUPLICATES REMOVED)
L5 7 S L4 AND ELECTRO?
L6 70 S POLLEN AND ELECTROPORAT?
L7 57 DUP REM L6 (13 DUPLICATES REMOVED)